DBS Group Holdings Limited



Upside: 7.91%

Sector: Finance

Industry: Banking

Trading Data	
Closing Price (Dec 30th, 2017)	\$ 24.85
Outstanding Shares (mn)	2563.9
Market Capitalisation (mn)	6356.0
Enterprise Value (bn)	103.59
Trailing P/E	15.69 x

urces: Reuters. Team Analvsis

Valuation Date: 30 th Dec 17	
Methodology	
Dividend Discount Model	
12 Month Target Price	S\$26.82
Current Share Price	S\$24.85
Upside	7.91%

Source: Team Analysis

Industry Metrics		
NIM:	Net Interest Margin	
ROTCE:	Return on Tangible Common Equity	
CET1 Ratio:	Common Equity Tier 1 Ratio	
LCR:	Liquidity Coverage Ratio	
NSFR:	Net Stable Funding Ratio	
NPA:	Non-Performing Assets	
P/TBV	Price to Tangible Book Value	
SIBOR:	Singapore Inter-Bank Offer Rate	
LIBOR:	London Inter-Bank Offer Rate	
HIBOR:	Hong Kong Inter-Bank Offer Rate	

Figure 1: Key Financials

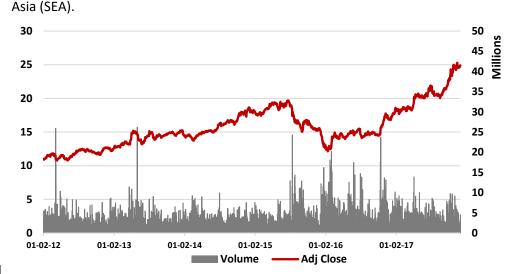
%	2017	2018	2019	2020	2021
Revenue Growth	15.6	9.7	9.4	8.5	8.2
Net Interest Margin	1.85	1.89	1.94	2.00	2.05
ROTCE	11.9	11.9	11.9	11.9	11.8
Dividend Payout Rate	28.0	29.0	30.0	31.0	32.0
CET1 Ratio	15.3	15.5	15.8	16.1	16.5
Liquidity Coverage Ratio	165.8	171.9	177.8	183.4	189.1
Net Stable Funding Ratio	120.8	122.5	124.2	126.0	127.7

Source: Team Analysis

Valuation Date: 30TH December 2017 **Recommendation: HOLD Stock Exchange: SGX** Current Price: SGD \$24.85

Target Price: SGD \$26.82 Ticker: D05

SUMMARY: DBS Group Holdings Ltd is a financial service group that operates under its principal subsidiary, DBS Bank Ltd. Headquartered in Singapore, DBS hold significant presence as the largest bank domestically and throughout Southeast



HIGHLIGHTS:

We issue a HOLD recommendation with a 1-year target price of S\$26.82 per share, implying an 7.91% upside from its closing price on 30th December 2017 of \$\$24.85. Our valuation is based on a three stage Dividend Discount Model (DDM). Our recommendation is backed by the following catalysts:

INCREASED MARGINS DUE TO INTEREST RATE HIKES

With the Fed forecasting three rate hikes incoming in 2018, this will undoubtedly increase NIM for DBS as new loans will be issued at higher rates. 3-month LIBOR rates in 2017 have already increased 55.7% since January till December and is expected to rise further based on future rate hikes. In tandem, more rate hikes will be expected from the US Fed which will drive up the base lending rates further, increasing the pressure on banks in Hong Kong to increase their lending rates which will fuel a stronger Net Interest Margin (NIM).

DBS CAPITALISE ON ADVANCEMENT IN BANKING TECHNOLOGY

Technology in banking has enabled DBS to be more cost efficient. DBS has been pushing the boundaries for automation, with Al-driven assistance DBS managed to improve productivity of their workforce achieving highest income per employee at S\$538,805 significantly higher than competitors OCBC and UOB. Digital customers are more likely to generate superior returns with digital customers generating more than two times the income as compared to a traditional customer. Customer base is expected to increase with increase in net income leaning in as a result.

EXPANSIONS OVERSEAS REAPS HIGHER PROFITS

In recent years, DBS bank has diversified its revenue generation to a more varied geographical base. Prima facie, the acquisition of ANZ Bank's retail banking and wealth management helped further cement DBS Bank's status as one of Asia-Pacific leading banks. Secondly, DBS's Bank's interests in the Indian market are starting to materialise. In 2017 Q3 DBS Bank India, the India arm of DBS Group Holdings India won in-principle approval to convert its existing franchise in India to a locally incorporated wholly-owned subsidiary (WOS) in the country. This will serve as a catalyst in the medium term as DBS's operations in India starts to mature and rake in significant returns from the expanding business.

Figure 2: Revenue by Operating Divisions

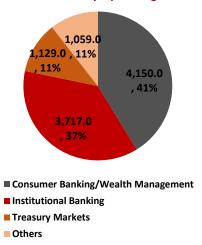
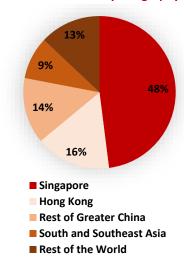
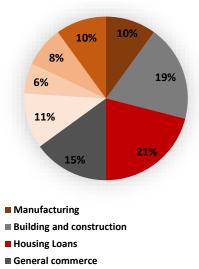


Figure 3: Gross Loans by Geography



Source: Company Data

Figure 4: Gross Loans by Segments



Transportation, storage and communication

FI, Investment and holding companiesProfessionals, private individuals

Source: Company Data

Others

BUSINESS DESCRIPTION

DBS Group Holdings Ltd (D05) is a financial service group that operates under its principal subsidiary, DBS Bank Ltd. Headquartered in Singapore, DBS hold significant presence as the largest bank domestically and throughout Southeast Asia (SEA).

DBS provides a range of financial services, through four operating divisions: Institutional Banking; Consumer Banking/Wealth Management; Treasury and Others (Figure 2).

- 1) Institutional Banking: Core segment that provides financial services for well-established clients from large corporates to SME, government-backed institutions, bank and non-bank institutions.
- 2) Consumer Banking/Wealth Management: This segment provides retail banking and insurance services, catering the needs of the mass-market and high net-worth clients.
- 3) Treasury: Treasury products and services are offered to market participants, ranging from individuals, corporations to financial institutions.
- 4) Others: Assortment of activities from corporate decisions, where income and expenses are not derived from other business segments

DBS is the largest bank by total assets in Singapore and SEA with over \$\$480mn worth of assets. This allow DBS to remain the leading banks with substantial influence in Singapore, Hong Kong, Rest of Greater China and SEA (Figure 3). The Bank continues to expand its presence overseas, holding an extensive network of 280 branches over 18 countries (Singapore, China, Hong Kong, United Kingdom, United States, South Asia and SEA).

COMPANY STRATEGIES

DBS adopts a cautious manner in their lending behaviour, ensuring a well distributed and stable portfolio that spans across various industries, where the largest contributors to the portfolio are Building and construction, General commerce and Housing Loans (Figure 4).

DBS's aims to revitalize their brick-and-mortar financial services through digitalization to enhance its competitiveness locally and in the Asia market.

DBS's key drivers rely on 4 pillars:

- 1. Build a diversified corporate bank
- 2. Build a regional wealth business
- 3. Regain leadership in SG (e.g. SMEs);
- 4. Build out SME in growth markets (e.g. China and India)

To combat financial disruption and high cost of services in the market, DBS's engagement in digital investments has led to high returns. The result of digital banking led to a high value add to the company's performance, with digital segment accounting for 39% of clients, generating 60% of income. DBS's leadership in contactless payment system NetsPay has the potential to unite and eliminate shortcomings of seamless payments offered domestically. The e-payment market and The Bank's existing digital investments could likely boost DBS's key driving forces in creating an efficient digital banking system for its customers base across all realms.

Figure 5:

Name of Shareholders	%
Citibank Nominees Singapore Pte Ltd	19.99
Maju Holdings Pte Ltd	18.05
DBS Nominees Pte Ltd	15.19
Temasek Holdings (Private) Ltd	11.18
DBSN Services Pte Ltd	9.63
HSBC (Singapore) Nominees Pte Ltd	6.47
United Overseas Bank Nominees Pte Ltd	2.48
Raffles Nominees (Pte) Ltd	1.85
BNP Paribas Securities Services	1.32
Lee Pineapple Company Pte Ltd	0.76
DB Nominees (S) Pte Ltd	0.54
Lee Foundation	0.43
DBS Vickers Securities (S) Pte Ltd	0.27
BNP Paribas Nominees Singapore Pte Ltd	0.26
OCBC Nominees Singapore Pte Ltd	0.15
OCBC Securities Private Ltd	0.13
Morgan Stanley Asia (Singapore) Securities Pte Ltd	0.13
UOB Kay Hian Pte Ltd	0.12
Phillip securities Pte Ltd	0.08
Société Générale Singapore Branch	0.08

Source: Company Data

Figure 6:

List of Board of Directors		
Peter Seah	Piyush Gupta	
Bart Broadman	Euleen Goh	
Ho Tian Yee	Nihal Kaviratne	
Ow Foong Pheng	Andrew Sekulic	
Danny Teoh		

Source: Company Data

Figure 7:

Key Management		
David Gledhill	Tan Su Shan	
Jimmy Ng	Sim S Lim	
Surojit Shome	Elbert Pattjin	
Jerry Chen	Jeanette Wong	
Lam Chee Kin	Andrew Ng	
Karen Ngui	Shee Tse Koon	
Paulus Sutisna	Sebastian Paredes	
Lee Yan Hong		

Source: Company Data

CORPORATE GOVERNANCE

SHAREHOLDING STRUCTURE

DBS's capital stock consists of 2,542,658,385 ordinary shares and 6,303,700 treasury shares. The ordinary shareholders are 99% made up by investment and financial institutions located in Singapore (Figure 5).

BOARD AND MANAGEMENT

The strength in DBS's leadership lies in the competent and transparent leadership and management. The Board of Director consists of veteran bankers and distinguished individuals in various fields (consumer goods, auditing) with a high proportion of independent non-executive directors (six out of nine). The positive partnership between Chairman (Peter Seah) and Chief Executive Officer (Piyush Gupta) further enhances the leadership, ensuring clear decision-making and effective management of the Bank (Figure 7).

The Board delegates authority to five board committees, which strictly complies with the Singapore Code of Corporate Governance, for greater efficiency in company performance:

- 1) Nominating Committee: Evaluation and assessment on the quality and transparency of the Board.
- 2) Board Executive Committee: Review on major decisions requiring the Board's attention.
- 3) Audit Committee: Monitor integrity and accordance of financial statements to the Singapore Financial Reporting Standards
- 4) Board Risk Management Committee: Analysis of market risk and outlook of the market to guide on the Bank's strategy and portfolios
- 5) Compensation & Management Development Committee: Oversee remuneration policy and ensure the corporate governance practices are not compromised.

INDUSTRY OVERVIEW

INTEREST RATE HIKES

Singapore Inter Bank Offered Rate (SIBOR) has been on the rise with 3m SIBOR up 0.968% to 1.208% due to interest rate hikes by the feds and from liquidity tightening measures. With fiscal stimulus and tax cuts ongoing in the US to stimulate growth, interest rates are expected to go up in 2018 to curb inflation. Banks with floating rate loans that are pegged to SIBOR will be expected to see better interest margins.

THREAT FROM OIL AND GAS SECTOR

Defaults from the Oil and Gas (O&G) sector continues as oil prices remains too low for O&G firms to be profitable. Analyst estimate that oil must be around \$70 a barrel for firms to make a decent margin. Thus, banks are required to set aside more provisions in anticipation of more bad debts with DBS setting aside S\$815 million in 3Q 2017 to remove uncertainty. However, overall asset quality for Singapore banks remains high as banks managed to reduce exposure through diversification of loan portfolio. DBS exposure to the oil and gas amounts to S\$5.3 billion which is less than 2% of group's total loan.

Figure 8: Porters 5 Forces (Appendix 10)



Source: Team Analysis

TECHNOLOGY IN BANKING

The introduction of technology into banking has made banks more cost efficient by cutting down on labour cost. DBS has been able to leverage on technology such as chat bot, an automated customer service bot which can respond faster to customer's needs and replace the need for human labour. DBS managed to reduce their headcount despite increasing revenue growth in 2017. Hence, technology has resulted in improving margins for banks by reducing expenses.

The new age of digital banking has improved convenience of banking. DBS customers can set up a digital account in less than 90 seconds and all transactions can be done online without having visit a physical bank outlet. Furthermore, advance security such as biometrics removes the need for tedious paperwork. Thus, the amount of non-cash payments has soared drastically with a 30.9% growth in emerging Asia markets in 2017. Growth are expected to remain strong due to increased convenience from mobile payments.

IMPLEMENTATION OF IFRS9

The implementation of IFRS9 will result in stricter provisions for banks to reduce risk. Given the IFRS9 requirements in terms of classification, measurement, and impairment calculation and reporting, banks should expect to be required to make some changes to the way they do business, allocate capital, and manage the quality of loans and provisions at origination. Provision levels are expected to substantially increase under IFRS9 vs IAS. This will no doubt reduce profitability for banks but at the same time reduce the risk that banks are exposed to.

STABLE ECONOMIC GROWTH

The big 3 banks in Singapore all faced good loan growth momentum largely due to Improving economic conditions in Asia. DBS, UOB and OCBC all had healthy top-line profitability improvements, supported by stable or better net interest margins. UOB and OCBC reported a 12% YoY growth in 3Q net profit. The growth is expected to remain stable in 2018 as economic outlook remains strong and positive. The Ministry of Trade and Industry Singapore expects a stable growth of 1.5%-3% in 2018 due to aggressive growth stimulus from US as well as from emerging markets.

COMPETITIVE POSITIONING

Banking industry in Singapore has become very competitive due to government policies attracting foreign competition. However, due to high regulation standards from MAS, many foreign banks may not be able to get licensing or had their license revoked. The main competition in modern day banking is the race for innovation. The big 3 banks in Singapore are competing in a digital arms race to roll out better and more efficient products and to streamline their processes. Banks are allocating large amounts of resources to do so. DBS being the longest running local banks in Singapore has a certain degree of pricing power as they have long history of good records and consumers are willing to pay a premium for it. Furthermore, despite the presence of new methods of financing such as direct financing (Bonds) and equity financing (IPO), bank financing remains the most popular method for financing especially for SMEs.

Figure 9: Total Number of Transactions

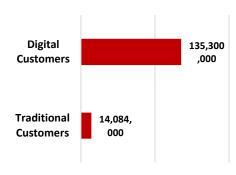
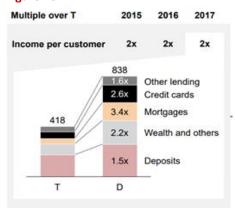
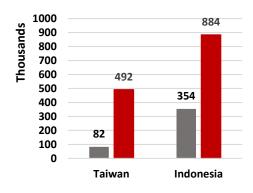


Figure 10:



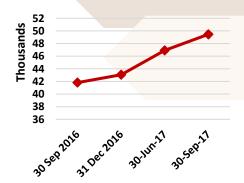
Source: DBS Investors Day 2017

Figure 11: Number of Customers in Millions (2016 – 2018)



Source: Company Data

Figure 12: Customer Loan Growth in Rest of Greater China



INVESTMENT SUMMARY

We issue a **HOLD** recommendation with a 1-year target price of S\$26.82 per share, implying an 7.91% upside from its closing price on 30th December 2017 of S\$24.85. Our valuation is based on a three stage Dividend Discount Model (DDM). Our recommendation is backed by the following catalysts:

DIGITAL BANKING

With a start-up culture, DBS has embraced innovation and gone through a technology overhaul from front end to back end, improving the number of digital transactions (Figure 9). Technology in banking has enabled DBS to be more cost efficient. DBS has been pushing the boundaries for automation, with Al-driven assistance DBS managed to improve productivity of their workforce achieving highest income per employee at \$\$538,805, significantly higher than competitors OCBC and UOB. With staff cost accounting for 56% of operating expenses as at 3Q 2017, we expect more efficient use of manpower through automation, resulting in cost savings of \$\$352 mn with forecasted margins to improve from 27.1% to 24.1%.

The demand for digital banking has been one the rise due to hassle free banking. Digital banking allows for greater convenience in transactions, with customer-initiated transactions per consumer growing from 4 transactions per year to 60 transactions per year. Furthermore, application for digital banking products has seen significant growth with application for mortgages increasing 3.4 times, deposits increasing 1.5 times and credit cards increasing 2.6 times in 2017. Digital customers are more likely to generate superior returns with digital customers generating more than two times the income as compared to a traditional customer. With DBS rapid expansion of its digital customer base, we can expect income to grow at a CAGR of 8.4% (Figure 10).

GLOBAL ECONOMIC RECOVERY BRINGS ABOUT HIGHER INTEREST RATES

With the Fed forecasting three rate hikes incoming in 2018, this will undoubtedly increase NIM for DBS as new loans will be issued at higher rates. 3-month LIBOR rates in 2017 have already increased 55.7% since January till December and is expected to rise further based on future rate hikes. Local SIBOR rates have increased largely in correlation to the rate hikes by the US Feds as seen in the SIBOR chart when interest rates were raised in March, June and finally December. Combined with the expected hikes in 2018, NIM from local mortgage will definitely increase in 2018.

3-Month HIBOR rates in Hong Kong have also risen to a rate of 1.31% in December as compared to 1.02% in January although the Hong Kong Monetary Authority has mirrored the Fed's rate hike decisions throughout 2017 which brought the base lending rate to 1.75%. HIBOR still remains relatively low due to the stiff competition between banks in Hong Kong which will change in 2018 as there might be more rate hikes from the US Fed which will drive up the base lending rates further, increasing the pressure on banks in Hong Kong to increase their lending rates which will fuel a stronger NIM.

INCREASED GLOBAL FOCUS

The acquisition of ANZ's wealth management and retail banking business is expected to be completed progressively from the second quarter of 2017 onwards, target is for full completion in all markets by early 2018. The portfolio of businesses being acquired is in Singapore, Hong Kong, China, Taiwan and Indonesia, representing total deposits of SGD 17 billion, loans of SGD 11 billion, investment AUM of \$\$6.5 billion and total revenue of \$\$825 million for FY2016. DBS is reported to gain about 410,000 customers in Indonesia and 530,000 for Taiwan (Figure 11).

Figure 13: Dividend Discount Model

Initial Cost of Equity		11.0%
Baseline P/TBV Multiple	1.41 >	
Terminal Value		132320
PV of Dividends		14915
Implied Equity Value	68753	
Total Shares Outstanding	2	2563.94
Implied Share Price	\$	26.82
Current Share Price	\$	24.85
Upside		7.91%

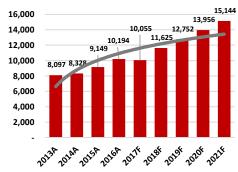
Source: Team Estimates

Figure 14: Cost of Equity

Risk Free Rate	2.40%
Beta	1.20
Market Return	9.58%
Market Risk Premium	7.18%
САРМ	11.0%

Source: Team Estimates

Figure 15: Revenue Growth



Source: Team Estimates

With DigiBank, DBS has penetrated India's retail banking, about 1.5 million customers in India have been amassed to date. Also, in 3Q 2017 DBS Bank India, the India arm of DBS Group Holdings India won in-principle approval to convert its existing franchise in India to a locally incorporated wholly-owned subsidiary (WOS) in the country. This will serve as a catalyst in the medium term as DBS's operations in India starts to mature and rake in significant returns from the expanding business.

VALUATION

Our base case valuation arrives at a target price of \$\$26.82, attributed by our Dividend Discount Model (DDM). This is based on that fact that DBS Group Holdings have a target dividend payout rate of 35% with stable dividend growth (Figure 13).

DIVIDEND DISCOUNT MODEL (APPENDIX 9)

DBS Group Holdings has a strong track record of dividend payouts with a targeted payout rate of 35%. However, we feel that a payout rate of 35% is too aggressive albeit its strong balance sheet. Thus, we used a 10-year Dividend Discount Model with support for three stages, whereby the first stage is a projection of growing dividends, from 28% payout rate in 2017, gradually increasing to 32% in 2021. The second stage is projected by diminishing dividend growth, from 32.5% in 2022 to 34.5% in 2026. The third stage is projected by calculating the terminal value. We used both the Perpetuity Growth Rate Method, as well as the Multiples Method.

TERMINAL GROWTH RATES

Terminal Net Income Growth was 7.7%, Terminal Cost of Equity was 10.5%, and Terminal ROTCE was 11.66%. These rates were adjusted due to a changing dividend payout ratio in each phase, with Cost of Equity that gradually declines from an initial 11% to 10.5%. ROTCE and Total Asset Growth also declines over the 10 years of projections.

COST OF EQUITY

Cost of Equity was calculated through the Capital Asset Pricing Model (CAPM). The 10-years Singapore Government bond rate was used as the risk-free rate, estimated to be 2.40% by taking the average of several bond yield across recent years. DBS's beta of 1.20 was derived by using five years weekly prices against the Straits Times Index (STI). The market return of 9.58% is based on a 15-year average of the Straits Times Index (STI), resulting in a market risk premium of 7.18%. This leads us to a cost of equity of 11.0% (Figure 14).

FINANCIAL ANALYSIS

REVENUE GROWTH

DBS Group Holdings revenue streams comes from both interest and non-interest income. With a CAGR of 5.6% in the historical years of projection, DBS has shown consistent overall growth rates apart from the most recent fiscal year due to higher provisions of loan losses. However, revenues are expected to rise by double digits (16%) in 2017 due to an increased LIBOR rate from a 3-month annualized average of 0.74% to 1.26% on 2017. Furthermore, amount of gross loans is also on the uptrend, which will only put DBS in a prime position for strong revenue growth. Therefore, we foresee a continued trend of growth, with a CAGR of 9% in the forecasted years (Figure 15).

Figure 16: Loan Portfolio

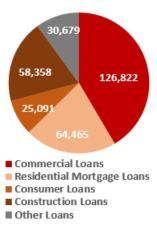
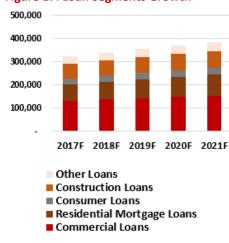
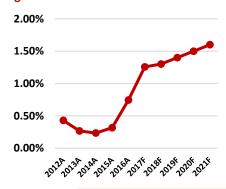


Figure 17: Loan Segments Growth



Source: Team Estimates

Figure 18: LIBOR Rates



Source: Global-Rates

Figure 20: Basel III Requirements

Common Equity Tier 1 Ratio	6.50%
Capital Conservation Buffer	2.50%
Common Equity Tier 1 + CCB	9.00%
Tier 1 Capital to RWA Ratio:	10.50%
Total Capital to RWA Ratio:	12.50%
Leverage Ratio:	3.00%
Tangible Common Equity Ratio:	3.00%

Source: Bank for International Settlements

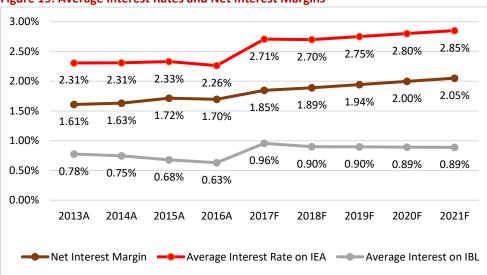
LOAN PORTFOLIO

DBS's loan portfolio can be split into five main segments, i.e. Commercial Loans, Residential Mortgage Loans, Consumer Loans, Construction Loans, and Others (Figure 16). Overall loan portfolio has been growing in the historical years with a CAGR of 9.3%. The largest segment is constituted by commercial loans with of 41.5% of total loans, followed by residential mortgages and construction loans with 21% and 19% respectively. Although growth in residential mortgages are the highest among the segments with double digit growth rates in year 2015 and 2016, we assume a diminished increase in growth rates for the residential mortgage segments in the years of forecast as Housing Price Index in Singapore is gradually decreasing. Therefore, we expect the total loan portfolio growth rate to slow-down to a CAGR of 4.5% in the forecasted years (Figure 17).

NET INTEREST MARGINS

DBS's Net Interest Margins (NIM) has been on the rise in the historical years, from 1.6% in 2013 to 1.7% in 2016 and is expected to continue its uptrend, from 1.85% in 2017 to 2.05% in 2021, driven by decreasing funding costs on deposits. Average Interest Rates on Interest Bearing Liabilities (IBL) was generally falling over the years, with the exception of 2017 due to a sudden spike in LIBOR rates (Figure 18). A continued downtrend from 0.96% in 2017 to 0.89% in 2021 is expected due to decreasing spreads paid on deposits (Figure 19).

Figure 19: Average Interest Rates and Net Interest Margins

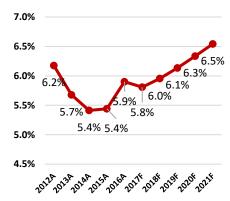


Source: Team Analysis

REGULATORY CAPITAL RATIOS

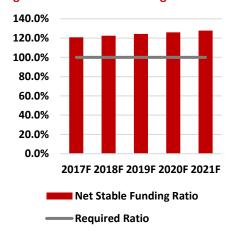
DBS must meet the given the Basel III and Monetary Authority of Singapore (MAS) stringent regulatory requirements of a Common Equity Tier 1 (CET1) Ratio of 9% including the Capital Conservation Buffer of 2.5% and the Tangible Common Equity (TCE) Ratio of 3%. Also, we have used DBS's targeted 13% CET1 Ratio as a baseline to gauge the company's performance (Figure 20).

Figure 22: Leverage Ratio



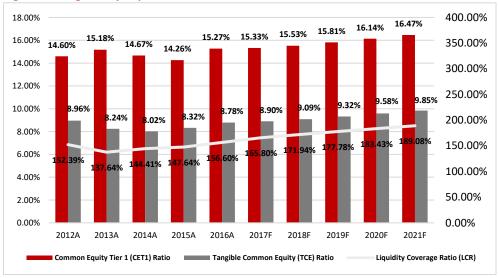
Source: Company Data and Team Analysis

Figure 23: Net Stable Funding Ratio



Source: Team Analysis

Figure 21: Regulatory Capital Ratios



Source: Team Analysis

COMMON EQUITY TIER 1 (CET1) RATIO

In the historical years, DBS has stayed well above its targeted CET1 Ratio, hovering about 14%-15%. This is expected from DBS due to its strong balance sheet and its important presence in Singapore. Therefore, we project that DBS's CET1 Ratio will continue staying in the healthy region and gradually improving over the forecasted years (Figure 21).

LEVERAGE RATIO AND TANGIBLE COMMON EQUITY RATIO

Both ratios stay above the regulatory requirements of in both the historical years and forecasted years, with Leverage Ratio and TCE Ratio averaging 5.7% and 8.5% respectively in the historical years, and 6.2% and 9.3% respectively in our forecasted years. DBS stays far above the required minimum level of 3% even in our simulated downside scenario (Figure 21 and 22).

NEW RATIOS UNDER BASEL III

These new regulations now introduce the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR). The LCR requirements begins in 2015, rising to 100% by 2019, while the NSFR requirements begins in 2018, requiring 100%.

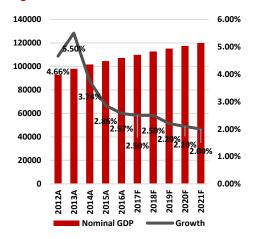
LIQUIDITY COVERAGE RATIO (LCR)

DBS's LCR remains well above the required levels in the historical years, estimated based on the company's liquid assets and net cash outflows. Furthermore, our projected LCR stays above 160% throughout the next five years, far above the requirements (Figure 21).

NET STABLE FUNDING RATIO (NSFR)

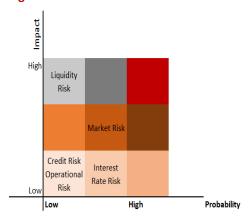
The NSFR is estimated to be 125% in both the historical years, based on Loans, Deposits and Net Inflows. We expect a slight increase over the projected five years, from 121% in 2017 to 128% in 2021, staying above the 100% requirement (Figure 23).

Figure 24: Nominal GDP and Growth



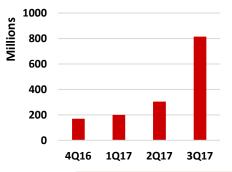
Source: Singstats

Figure 25: Risk Matrix



Source: Team Analysis

Figure 26: Allowances for Credit Losses



Source: Company Data

NOMINAL GDP

Singapore Nominal GDP has been growing YoY since 2012, with growth rates slowing down due to Singapore being a highly developed first world country. We expect a continued slow-down of growth rates in our projected years, from 2.5% in 2017 to 2% in 2021. With an increase in overall GDP, it will directly affect the amount of gross loans as there is a positive correlation between loan growth and GDP (Figure 24).

SENSITIVITY ANALYSIS

Based on insights, we performed a sensitivity analysis on the primary variables of the model, emphasizing on testing values on the Initial Cost of Equity and P/TBV Multiple. P/TBV must drop 0.4x over the next five years to change our recommendation to a SELL, at S\$20.88. Similarly, cost of equity must increase more than 1% than the initial 11% to render a SELL call. However, due to DBS being an industry leader, Cost of Equity is relatively stable, and we do not expect a sudden change in the metric (Appendix 9).

INVESTMENT RISKS

CREDIT RISK (PROBABILITY - LOW, IMPACT - HIGH)

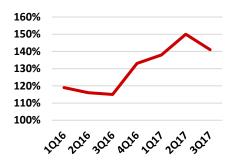
As of 3Q17, DBS has an allowance coverage of 83% of their NPA and has recognized its oil and gas support services as NPA early. This translated to an 87% increase in allowances as compared to 3Q16 and ultimately reduced net profits for the quarter. However, the credit risk for DBS has been largely mitigated as allowances were allocated to all unsecured loans for the oil and gas support services along with a 115% allowance coverage for other services. With higher allowances this quarter, DBS has largely reduced its credit risks with its conservative NPA recognition (Figure 26).

With the concentration of loans being diversified among eight industries, the highest being housing loans at 21%, DBS mitigates systematic risks in its portfolio by spreading out its loans among its industries to prevent concentration risk in a specific sector. However, the geographical concentration of the loans is skewed with Singapore being 48% of loans and advances made to customers.

MARKET RISK (PROBABILITY - MEDIUM, IMPACT - MEDIUM)

Market risk directly affects the trading positions taken by DBS and constitutes to about 56% of DBS's treasury risk weighted assets. The expected shortfall (ES) for the trading books have reported an increasing amount of ES for a higher number of days which shows that they are trading in riskier positions. However, the P&L for the trading books reports an increase in trading income over the quarters in 2017 where there is an increase of about 20 days where the trading books reported a profit of > 0-5 million.

Figure 27: Liquidity Coverage Ratio (Quarterly)



INTEREST RATE RISK (PROBABILITY - MEDIUM, IMPACT - LOW)

Besides affecting the trading positions of DBS, growth estimates of the company are also based on the expectations that the US Federal Reserve will raise interest rates at least once in the next fiscal year. If there are no rate hikes in the US next year, growth will have been mitigated as loan interests will be lower. However, higher interest rates will bring about higher net interest margin for DBS but might stifle investments if interest rates rise too rapidly in the future.

LIQUIDITY RISK (PROBABILITY - LOW, IMPACT - HIGH)

As of 3Q17, DBS's Liquid Coverage Ratio is at 141% which is much higher than the MAS requirement of 80% for 2017 and will meet regulations for 2018 when the LCR requirement is raised to 90%. This implies that DBS can meet current debt obligations easily if there is a sudden market downturn (Figure 27).

OPERATIONAL RISK (PROBABILITY - LOW, IMPACT - LOW)

Losses in 2016 due to operations has increased from \$\$7.7 million from 2015 to \$\$20.33 million in 2016, was mainly attributed by an external fraud which was due to an isolated incident. The losses were only 0.18% of total operating income in 2016 which is minimal, so DBS has mitigated this risk relatively well despite the incident.